Amendment to the Claims:

This listing of claims (1-18) will replace all prior versions, and listing of claims in the application.

1. (Original) A luminaire comprising:

a light-directing element having a light emission window,

said light-directing element having a shape for directing light, which light originates from an electric light source to be accommodated, into an optical fiber system,

characterized in that said shape is calculated in accordance with a ray-tracing algorithm which takes into account that said light source to be accommodated is voluminous.

2. (Original) A luminaire according to claim 1, characterized in that said shape is composed of n solids of revolution of parabolic sectors, wherein adjoining parabolic sectors form an integral surface.

3. (Original) A luminaire according to claim 2, characterized in that the parabolic sectors are parts of parabola defined by the following set of equations:

$$a(i) = (z(i) - z(i + 1)) / (x(i)^2 - x(i+1)^2)$$

$$b(i) = a(i)$$

$$c(i) = (x(i)^2 * z(i + 1)) - ((x(i + 1)^2 * z(i)) / (x(i)^2 - x(i + 1)^2)$$

wherein:

a(i), b(i) and c(i) are polynomial coefficients of the parabolic sectors

such that coordinates of each point of the reflective surface fulfill the condition:

$$a(i)*x^2 + b(i)*y^2 - z + c(i) = 0;$$

x, y, z are coordinates of the ith surface of revolution of the parabola in a linear x, y, z tri-coordinate system;

the coordinates x(i), z(i), x(i+1), z(i+1) are limits of the ith parabolic sector in a plane xz;

i is an integer from 1 to n.

4. (Previously Presented) A luminaire according to claim 1, characterized in that the light-directing element is chosen from the group consisting of a reflector, a refractor, and a combination thereof.

5. (Previously Presented) A luminaire according to claim 1, characterized in that the light source is an electric lamp.

6. (Original) A luminaire according to claim 5, characterized in that the electric lamp is a Light Emitting Diode.

7. (Previously Presented) A luminaire according to claim 1, characterized in that the optical fiber system comprises a bundle of optical fibers.

8. (Original) A luminaire according to claim 7, characterized in that a glass rod is positioned at an end of the optical fiber.

9. (Previously Presented) A dynamic road-marking unit comprising a luminaire according to claim 1.

10. (Original) A dynamic road-marking unit according to claim 9, characterized in that the luminaire has a shaped housing adapted to fit a saw-cut recess for accommodating the unit.

11. (New) A luminaire comprising:

a light-directing element having a light emission window,

said light-directing element having a shape for directing light, which light originates from an electric light source to be accommodated, into an optical fiber system,

wherein said shape is calculated in accordance with a ray-tracing algorithm which takes into account that said light source to be accommodated is voluminous,

wherein said shape is composed of n solids of revolution of parabolic sectors, wherein adjoining parabolic sectors form an integral surface and wherein said parabolic sectors are parts of parabola defined by the following set of equations:

$$a(i) = (z(i) - z(i + 1)) / (x(i)^2 - x(i+1)^2)$$

$$b(i) = a(i)$$

$$c(i) = (x(i)^2 * z(i + 1)) - ((x(i + 1)^2 * z(i)) / (x(i)^2 - x(i + 1)^2)$$

wherein:

a(i), b(i) and c(i) are polynomial coefficients of the parabolic sectors

such that coordinates of each point of the reflective surface fulfill the condition:

$a(i)*x^2 + b(i)*y^2 - z + c(i) = 0$;

x, y, z are coordinates of the ith surface of revolution of the parabola in a linear x, y, z tri-

coordinate system;

the coordinates x(i), z(i) , x(i+1), z(i+1) are limits of the ith parabolic sector

in a plane xz;

i is an integer from 1 to n.

12. (New)   A luminaire according to claim 11, wherein the light-directing element is

chosen from the group consisting of a reflector, a refractor, and a combination thereof.

13. (New) A luminaire according to claim 11, wherein the light source is an electric

lamp.

14. (New) A luminaire according to claim 13, wherein the electric lamp is a Light

Emitting Diode.

15. (New) A luminaire according to claim 11, wherein the optical fiber system

comprises a bundle of optical fibers.

16. (New) A luminaire according to claim 15, wherein a glass rod is positioned at an end of the optical fiber.

17. (New) A dynamic road-marking unit comprising a luminaire according to claim 11.

18. (New) A dynamic road-marking unit according to claim 17, wherein the luminaire has a shaped housing adapted to fit a saw-cut recess for accommodating the unit.